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NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAplus

NEWS 5 FEB 05 German (DE) application and patent publication number format changes

NEWS 6 MAR 03 MEDLINE and LMEDLINE reloaded

NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded

NEWS 8 MAR 03 FRANCEPAT now available on STN

NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN

NEWS 10 MAR 29 WPIFV now available on STN

NEWS 11 MAR 29 No connect hour charges in WPIFV until May 1, 2004

NEWS 12 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA

NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004

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SINCE FILE TOTAL

FULL ESTIMATED COST ENTRY SESSION 0.21 0.21

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STRUCTURE FILE UPDATES: 14 APR 2004 HIGHEST RN 675571-70-7 DICTIONARY FILE UPDATES: 14 APR 2004 HIGHEST RN 675571-70-7

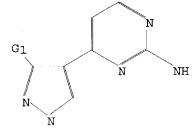
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

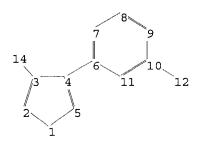
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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

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chain nodes :

12 14

ring nodes :

1 2 3 4 5 6 7 8 9 10 11

chain bonds :

3-14 4-6 10-12

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11

exact/norm bonds :

1-2 1-5 2-3 3-14 10-12

exact bonds :

3-4 4-5 4-6

normalized bonds :

6-7 6-11 7-8 8-9 9-10 10-11

isolated ring systems :

containing 1 : 6 :

G1:H,Ak

Match level :

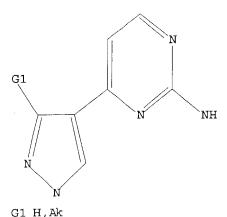
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 14:CLASS

=> d l1

L1 HAS NO ANSWERS

L1

STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 11:38:41 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1337 TO ITERATE

100.0% PROCESSED

1337 ITERATIONS

44 ANSWERS

SEARCH TIME: 00.00.01

L2

44 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

155.42 155.63

FILE 'CAPLUS' ENTERED AT 11:38:46 ON 16 APR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12

L3

=> d l3 1- ibib abs hitstr YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):y

ANSWER 1 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2004:41464 CAPLUS

DOCUMENT NUMBER:

140:111424

TITLE:

Preparation of phenyl-[4-(3-phenyl-1H-pyrazol-4-yl)-

pyrimidin-2-yl]-amines as protein tyrosine kinase

INVENTOR(S):

Furet, Pascal; Imbach, Patricia; Ramsey, Timothy

Michael; Schlapbach, Achim; Scholz, Dieter; Caravatti,

Giorgio

PATENT ASSIGNEE(S):

Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE:

GI

PCT Int. Appl., 96 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT	NO.	KI	ND :	DATE			A	PPLI	CATI	N NC	ο.	DATE			
	WO 2004	005282	2 A	1 :	2004	0115		W	20	03-E	P735	0	2003	0708		
	W:	AE, A	AG, AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CR, CU,													
		HR, H	HU, ID,	ΙL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	KΖ,	LC,	LK,	LT,	LU,
		LV, M	MA, MD,	MK,	MN,	MX,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,
		SC, S	SE, SG,	SK,	SY,	ТJ,	TM,	TN,	TR,	TT,	UA,	US,	UZ,	VC,	VN,	YU,
		ZA, Z	ZW, AM,	AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM					
	RW:	AT, E	BE, BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IT, L	JU, MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR				-	-	
	PRIORITY APP				(GB 20	002-1	15844	1	Α	20020	0709				
OTHER SOURCE(S):				MAR	MARPAT 140:111424											
	GT															

AΒ The title compds. [I; m = 1-5; R1 = alkylsulfonyl, (un)substituted aminosulfonyl, amino, etc.; R2 = H, (un)substituted alkyl, heterocyclyl; R3 = H, (un)substituted Ph; R31 = H if R3 = (un)substituted Ph or R31 = H(un) substituted Ph if R3 = H; with the proviso], useful for treating diseases which respond to an inhibition of a protein tyrosine kinase, were prepared and formulated. Thus, reacting 2-chloro-4-[3-(4-chlorophenyl)-1Hpyrazol-4-yl]pyrimidine with 4-(4-methylpiperazin-1-yl)phenylamine afforded I [R1 = 4-(4-methylpiperazin-1-yl); m = 1; R2 = H; R3 = 4-ClC6H4;R31 = H] which showed IC50 of 0.018 μ M, 0.023 μ M, and 0.01 μ M

CN

against EGF-R (HER-1), ErbB-2 (HER-2) and VEGF receptor (KDR), resp. The invention relates also to pharmaceutical compns. comprising the compds. I and to the use of such derivs. - alone or in combination with one or more other pharmaceutically active compds. - for the preparation of pharmaceutical compns. for the treatment especially of a proliferative disease, such as a tumor.

IT 646526-44-5P 646526-52-5P 646526-64-9P 646526-66-1P 646526-70-7P 646526-81-0P 646526-83-2P 646526-87-6P 646526-91-2P 646526-95-6P 646526-99-0P 646527-01-7P 646527-05-1P 646527-15-3P 646527-21-1P 646527-49-3P 646527-53-9P 646527-73-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of phenyl[4-(3-phenyl-1H-pyrazol-4-yl)pyrimidin-2-yl]amines as protein tyrosine kinase inhibitors)

RN 646526-44-5 CAPLUS

2-Pyrimidinamine, 4-[1-[2-(dimethylamino)ethyl]-5-(4-methylphenyl)-1H-pyrazol-4-yl]-N-[4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 646526-52-5 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(2,4-dichlorophenyl)-1-methyl-1H-pyrazol-4-yl]-N-(3,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 646526-64-9 CAPLUS

CN

2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-[4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 646526-66-1 CAPLUS

CN 2-Pyrimidinamine, 4-[1-methyl-5-(4-methylphenyl)-1H-pyrazol-4-yl]-N-[4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 646526-70-7 CAPLUS

CN 2-Pyrimidinamine, 4-[1-methyl-5-(4-methylphenyl)-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 646526-81-0 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} \\ \text{OMe} \\ \text{Me}_2 \text{N} - \text{CH}_2 - \text{CH}_2 \\ \text{N} \\ \text{N} \end{array}$$

RN 646526-83-2 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-(3,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} \\ \text{OMe} \\ \text{Me}_2 \text{N} - \text{CH}_2 - \text{CH}_2 \\ \hline \\ \text{N} \\ \\$$

RN 646526-87-6 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$Me_2N-CH_2-CH_2$$
 N
 N
 N
 N
 N
 N
 N
 N

RN 646526-91-2 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA

INDEX NAME)

RN 646526-95-6 CAPLUS
CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-methyl-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 646526-99-0 CAPLUS
CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-(1-methyl-4-piperidinyl)-1Hpyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA
INDEX NAME)

CN 2-Pyrimidinamine, 4-[1-[2-(dimethylamino)ethyl]-5-(4-methylphenyl)-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 646527-05-1 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-methylphenyl)-1-(1-methyl-4-piperidinyl)-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 646527-15-3 CAPLUS

CN 2-Pyrimidinamine, N-(3-methoxyphenyl)-4-[1-methyl-5-[4-(trifluoromethyl)phenyl]-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

RN 646527-21-1 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-methyl-1H-pyrazol-4-yl]-N-[4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 646527-49-3 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-methyl-1H-pyrazol-4-yl]-N-[3-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 646527-53-9 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[(1-methyl-4-piperidinyl)methyl]-1H-pyrazol-4-yl]-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 646527-73-3 CAPLUS

CN 2-Pyrimidinamine, N-[4-[(4-ethyl-1-piperazinyl)methyl]phenyl]-4-[1-methyl-5-(4-methylphenyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:590836 CAPLUS

DOCUMENT NUMBER:

139:149624

TITLE:

Preparation of 1,4-diarylpyrazole inhibitors of src

and other protein kinases

INVENTOR(S):

Young, Choon Moon

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003144309	A1	20030731	US 2002-146984	20020516
PRIORITY APPLN. INFO.	:	US	2002-146984	20020516
OTHER SOURCE(S):	MAI	RPAT 139:149624		

Title compds. I [G = XR, XAr; X = alkylidene wherein one or two non-adjacent methylene units of X are replaced by O, amino, S, CO, etc.; A = N, CR; R = H, aliphatic, etc.; Ar = (un)substituted 5-6 membered (un)saturated monocyclic ring, etc.; R1 = TnR, TnAr; n = 0-1; T = CO, CO2, COCO, etc.; R2 = H, Ar, aliphatic; R3 = R, Ar] are prepared For instance, 3-(bis(methylsulfanyl)methylene)pentane-2,4-dione (preparation given) is condensed with (pyridin-2-yl)hydrazine to give 1-[5-methyl-3-(methylsulfanyl)-1-(pyridin-2-yl)-1H-pyrazole-4-yl]ethanone. This intermediate is reacted with DMFDMA (reflux) and the resulting β -amino enone condensed with N-(3-benzyloxyphenyl)guanidine to give II. Many of the compds. have Ki \leq 1 μ M for src kinase. I are inhibitors of protein kinase, particularly inhibitors of src mammalian protein kinase involved in cell proliferation, cell death in response to extracellular stimuli.

ΙI

IT 475574-56-2P 475574-57-3P 475574-58-4P 475574-59-5P 475574-60-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1-phenyl-4-pyrimidinyl-substituted pyrazole inhibitors of src and other protein kinases)

RN 475574-56-2 CAPLUS

CN

2-Pyrimidinamine, 4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-N-[3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 475574-57-3 CAPLUS

CN 2-Pyrimidinamine, 4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-N-(3-phenoxyphenyl)- (9CI) (CA INDEX NAME)

RN 475574-58-4 CAPLUS

CN 2-Pyrimidinamine, N-(3-chlorophenyl)-4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

RN 475574-59-5 CAPLUS

CN 2-Pyrimidinamine, N-(3-methoxyphenyl)-4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

475574-60-8 CAPLUS RN

CNBenzoic acid, 3-[[4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-2-pyrimidinyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:150531 CAPLUS

DOCUMENT NUMBER:

138:187765

TITLE:

Preparation of heteroarylpyrazoles as p38 kinase

inhibitors

INVENTOR (S):

Anantanarayan, Ashok; Clare, Michael; Collins, Paul W.; Crich, Joyce Zuowu; Devraj, Rajesh; Flynn, Daniel L.; Geng, Lifeng; Graneto, Matthew J.; Hanau, Cathleen E.; Hanson, Gunnar J.; Hartmann, Susan J.; Hepperle, Michael; Huang, He; Koszyk, Francis J.; Liao, Shuyuan; Metz, Suzanne; Partis, Richard A.; Perry, Thao D.; Rao, Shashidhar N.; Selness, Shaun Raj; South, Michael

S.; Stealey, Michael A.; Talley, John Jeffrey;

Vazquez, Michael L.; Weier, Richard M.; Xu, Xiangdong;

Khanna, Ish K.; Yu, Yi

PATENT ASSIGNEE(S):

G.D. Searle and Co., USA

SOURCE:

U.S., 415 pp., Cont.-in-part of U.S. Ser. No. 196,623.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
~				
US 6525059	B1	20030225	US 2000-513351	20000224
US 6514977	B1	20030204	US 1998-196623	19981120

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WO 2000031063
                       A1
                            20000602
                                           WO 1999-US26007 19991117
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
             MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
             SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                        US 1998-196623
                                                         A2 19981120
                                        WO 1999-US26007 A1 19991117
                                        US 1997-47570P
                                                         P 19970522
                                        US 1998-83670
                                                         A2 19980522
                         MARPAT 138:187765
OTHER SOURCE(S):
```

$$R^3$$
 $R^2 \xrightarrow{//} \stackrel{//}{/} R^4$

Title compds. [I; R1 = H, OH, NH2, (cyclo)alk(en)yl, acyl, aryl, etc.; R2 = (un)substituted piperidinyl; R3 = (un)substituted pyrimidinyl; R4 = (un)substituted Ph; and pharmaceutically acceptable salts or tautomers thereof] were prepared by solution phase and solid phase parallel array reactions of ketones with hydrazines. Thus, R3CH2COMe (R3 = 4-pyridinyl) was condensed with 3,4-F(MeO)C6H3CHO to give the butenone (80%), which was cyclocondensed with TsNHNH2 to afford the title compound II (20.7%). The latter inhibited human p38 kinase activity in vitro with IC50 of 4.6 μ M and inhibited tumor necrosis factor α (TNF α) and interleukin 1 β (IL-1 β) release from human peripheral blood mononuclear cells following stimulation with lipopolysaccharide with IC50 of 0.5 μ M. Thus, I are useful for the treatment of inflammation, arthritis, asthma, and other disorders mediated by p38 kinase and TNF α .

IT 216505-48-5P

CN

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(p38 kinase inhibitor; preparation of heteroarylpyrazole p38 kinase inhibitors by cyclocondensation of hydrazines with ketones)

RN 216505-48-5 CAPLUS

2-Pyrimidinamine, 4-(3-methyl-5-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2003:92403 CAPLUS

TITLE:

Preparation of heteroarylpyrazoles as p38 kinase

inhibitors

138:137307

INVENTOR (S):

Anantanarayan, Ashok; Clare, Michael; Collins, Paul W.; Crich, Joyce Zuowu; Devraj, Rajesh; Flynn, Daniel L.; Geng, Lifeng; Graneto, Matthew J.; Hanau, Cathleen E.; Hanson, Gunnar J.; Hartmann, Susan J.; Hepperle, Michael; Huang, He; Koszyk, Francis J.; Liao, Shuyuan; Metz, Suzanne; Partis, Richard A.; Perry, Thao D.; Rao, Shashidhar N.; Selness, Shaun Raj; South, Michael S.; Stealey, Michael A.; Talley, John Jeffrey;

Vazquez, Michael L.; Weier, Richard M.; Xu, Xiangdong;

Khanna, Ish K.; Yu, Yi G.D. Searle and Co., USA

PATENT ASSIGNEE(S):

SOURCE:

U.S., 541 pp., Cont.-in-part of U.S. Ser. No. 83,670.

CODEN: USXXAM

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PA'	TENT NO.	KIND DATE	_	APPLI	CATION NO.	DATE	DATE			
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	DK, ES,	KE, LS, MW, FI, FR, GB, CM, GA, GN,	GR, IE,	IT, LU,	MC, NL, P	r, SE, BF,				
ΕP				EP 1999-965756 19991117						
		CH, DE, DK, LT, LV, FI,		GB, GR,	IT, LI, L	J, NL, SE,	MC, PT,			
BR	9915420	A 2002	0122	BR 19	99-15420	19991117	19991117			
EE	200100268	A 2002	1216	EE 20	01-268	19991117	19991117			
	512344		1128	NZ 19	99-512344	19991117	19991117			
	6525059		0225	US 20	00-513351	20000224				
	2001003882				01-3882					
	2001002456				01-2456					
	105620				01-105620		20010619			
	6423713	-			01-918481		- -			
US	6617324	B1 2003	0909	US 20	02-114297	20020402				

PRIORITY APPLN. INFO.:

US 1997-47570P P 19970522 US 1998-83670 A2 19980522 US 1998-196623 A 19981120 WO 1999-US26007 W 19991117 US 2001-918481 A3 20010731

OTHER SOURCE(S):

MARPAT 138:137307

GΙ

Title compds. [I; R1 = H, OH, NH2, (cyclo)alk(en)yl, acyl, aryl, etc.; R2 = (un)substituted piperidinyl or piperazinyl; R3 = (un)substituted pyrimidinyl; R4 = (un)substituted Ph; and pharmaceutically acceptable salts or tautomers thereof] were prepared by solution phase and solid phase parallel array reactions of ketones with hydrazines. Thus, R3CH2COMe (R3 = 4-pyridinyl) was condensed with 3,4-F(MeO)C6H3CHO to give the butenone (80%), which was cyclocondensed with TsNHNH2 to afford the title compound II (20.7%). The latter inhibited human p38 kinase activity in vitro with IC50 of 4.6 μ M and inhibited tumor necrosis factor α (TNF α) and interleukin 1 β (IL-1 β) release from human peripheral blood mononuclear cells following stimulation with lipopolysaccharide with IC50 of 0.5 μ M. Thus, I are useful for the treatment of inflammation, arthritis, asthma, and other disorders mediated by p38 kinase and TNF α .

IT 216505-48-5P

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(p38 kinase inhibitor; preparation of heteroarylpyrazole p38 kinase inhibitors by cyclocondensation of hydrazines with ketones)

RN 216505-48-5 CAPLUS

CN 2-Pyrimidinamine, 4-(3-methyl-5-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

76 THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 2002:888716 CAPLUS

DOCUMENT NUMBER:

137:384853

TITLE:

Preparation of pyrazolyl pyridinamines and

pyrimidinamines as inhibitors of Src and other protein

kinases

INVENTOR(S):

Moon, Young-Choon

PATENT ASSIGNEE(S):

Vertex Pharmaceuticals Incorporated, USA

PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.		KI:	ND	DATE								DATE			
	2002					2002						S156		2002	0516		
WO	2002	0925	73	A	3	2004	0122										
	$\mathtt{W}:$	ΑE,	AG,	ΑL,	AM,	AT,	AU,	ΑZ,	ΒA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UΖ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KΖ,	MD,	RU,
		ТJ,	TM														
	RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	ΒE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG
EP	1404	669		A.					EP 2002-769762 20020516								
	R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
, , ,							1	US 20	001-	2913	40P	P	2001	0516			
								Ţ	WO 20	002-1	US15	606	W	2002	0516		
OTHER SO	OURCE	(S):			MAR	PAT :	137:	3848!	53								

Ι

AB Title compds. I [wherein G = XR or XAr; X = independently alkylidene wherein 1-2 non-adjacent methylene units are independently replaced by O, NR, S, CO, CONR, NRCO, NRCONR, SO, SO2, NRSO2, SO2NR, or NRSO2NR; A = N or CR; R = H or (un)substituted aliphatic group; or NR2 = heterocyclyl; Ar = (un)substituted 5-6 membered monocyclic ring with 0-3 heteroatoms or 8-10 membered bicyclic ring with 0-4 heteroatoms; R1 = TnR or TnAr; n = 0-1; T = CO, CO2, COCO, COCH2CO, CONR, SO2, or SO2NR; R2 = H, Ar, or (un)substituted aliphatic group; R3 = R or Ar; or pharmaceutically acceptable derivs. thereof] were prepared as inhibitors of protein kinase, particularly inhibitors of Src mammalian protein kinase involved in cell proliferation,

ΙΙ

cell death and response to extracellular stimuli (no data). For example, 3-dimethylamino-1-[5-methyl-3-methylsulfanyl-1-(pyridin-2-yl)-1H-pyrazol-4-yl]propenone was coupled with N-(3-benzyloxyphenyl)guanidine in MeOH to give II (40%). I and compns. containing I are useful in the treatment and prevention of various inflammatory, autoimmune, destructive bone, proliferative, infectious, neurodegenerative, allergic, and cardiac disorders and diseases (no data).

IT 475574-56-2P, N-(3-(Benzyloxy)phenyl)-N-[4-[5-methyl-3-(2(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine
475574-57-3P, N-(3-Phenoxyphenyl)-N-[4-[5-methyl-3-(2(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine
475574-58-4P, N-(3-Chlorophenyl)-N-[4-[5-methyl-3-(2(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine
475574-59-5P, N-(3-Methoxyphenyl)-N-[4-[5-methyl-3-(2(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine
475574-60-8P, N-(3-(Methoxycarbonyl)phenyl)-N-[4-[5-methyl-3-(2(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(Src protein kinase inhibitor; preparation of pyrazolyl pyridinamines and pyrimidinamine inhibitors of protein kinases using condensation, cyclization, and substitution reactions)

RN 475574-56-2 CAPLUS

CN

2-Pyrimidinamine, 4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-N-[3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 475574-57-3 CAPLUS

CN 2-Pyrimidinamine, 4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-N-(3-phenoxyphenyl)- (9CI) (CA INDEX NAME)

RN 475574-58-4 CAPLUS

CN 2-Pyrimidinamine, N-(3-chlorophenyl)-4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} \\ & \text{N} & \text{Me} \\ \\ \text{MeS-CH}_2-\text{CH}_2 & \\ & \text{N} & \text{NH-} \\ & \text{C1} \\ \end{array}$$

RN 475574-59-5 CAPLUS

CN 2-Pyrimidinamine, N-(3-methoxyphenyl)-4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

RN 475574-60-8 CAPLUS

CN Benzoic acid, 3-[[4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-2-pyrimidinyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:449675 CAPLUS

DOCUMENT NUMBER:

137:33311

TITLE:

Preparation of pyrazolylpyridine- and -pyrimidineamines as JNK inhibitors

INVENTOR(S):
PATENT ASSIGNEE(S):

Ledeboer, Mark; Salituro, Francesco; Moon, Young-Choon

Vertex Pharmaceuticals Incorporated, USA

SOURCE:

PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

יידואו זר. 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO. DATE
WO 2002046184		WO 2001-US46383 20011205
W: AE, AG,	AL, AM, AT, AU,	, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR,	CU, CZ, DE, DK,	, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR,	HU, ID, IL, IN,	, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT,	LU, LV, MA, MD,	, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
PT, RO,	RU, SD, SE, SG,	, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
US, UZ,	VN, YU, ZA, ZW,	, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
		, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE,	DK, ES, FI, FR,	, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ,	CF, CG, CI, CM,	, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
		B AU 2002-28783 20011205
US 2002111353	A1 20020815	5 US 2001-5133 20011205
		7 EP 2001-989898 20011205
R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
	LT, LV, FI, RO,	PY
PRIORITY APPLN. INFO	· :	US 2000-251409P P 20001205
		WO 2001-US46383 W 20011205
OTHER SOURCE(S):	MARPAT 137:	$33311 \qquad \qquad 0 \text{ A } \text{Y}) \qquad \text{A} \text{V}$
GI		
		MK, CY, AL, TR US 2000-251409P P 20001205 WO 2001-US46383 W 20011205

RN CN

AB Title compds. (I; R = H or alkyl; R1 = cycloalkyl, Ph, pyridyl, etc.; R2 = H, alkoxymethyl, heterocyclylmethyl, etc.; R3 = Ph, CH2Ph, etc.; Z1 = pyridine- or pyrimidine-4,2-diyl) were prepared Thus, R4Z1CH(CHO)2 (R4 = MeS, Z1 = pyrimidine-2,4-diyl) was cyclocondensed with H2NNHC6H3F2-2,4 and the S-oxidized product aminated by cyclohexylamine to give I (R = R2 = H, R1 = cyclohexyl, R3 = C6H3F2-2,4). Data for biol. activity of I were given.

TT 434283-94-0P 434283-95-1P 434283-96-2P 434283-97-3P 434283-98-4P 434283-99-5P 434284-00-1P 434284-01-2P 434284-02-3P 434284-03-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrazolylpyridine- and -pyrimidineamines as JNK inhibitors) 434283-94-0 CAPLUS

2-Pyrimidinamine, N-cyclohexyl-4-[1-(2,4-difluorophenyl)-1H-pyrazol-4-yl]-(9CI) (CA INDEX NAME)

RN 434283-95-1 CAPLUS CN 2-Pyrimidinamine, 4-(3-methyl-1-phenyl-1H-pyrazol-4-yl)-N-phenyl- (9CI) (CA INDEX NAME)

RN 434283-96-2 CAPLUS
CN Benzenesulfonamide, 4-[[4-(5-methyl-1-phenyl-1H-pyrazol-4-yl)-2-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

RN 434283-97-3 CAPLUS
CN 2-Pyrimidinamine, N-cyclohexyl-4-[1-(phenylmethyl)-1H-pyrazol-4-yl]- (9CI)
(CA INDEX NAME)

RN 434283-98-4 CAPLUS
CN 2-Pyrimidinamine, N-cyclohexyl-4-(1-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

RN 434283-99-5 CAPLUS
CN 2-Pyrimidinamine, N-cyclohexyl-4-[1-(4-methoxyphenyl)-1H-pyrazol-4-yl](9CI) (CA INDEX NAME)

RN 434284-00-1 CAPLUS
CN 2-Pyrimidinamine, N-cyclohexyl-4-[1-(2,5-dichlorophenyl)-1H-pyrazol-4-yl](9CI) (CA INDEX NAME)

RN 434284-01-2 CAPLUS CN 2-Pyrimidinamine, N-(4-fluorophenyl)-4-(5-methyl-1-phenyl-1H-pyrazol-4-yl)-(9CI) (CA INDEX NAME)

RN 434284-02-3 CAPLUS
CN 2-Pyrimidinamine, N-(4-chlorophenyl)-4-(5-methyl-1-phenyl-1H-pyrazol-4-yl)(9CI) (CA INDEX NAME)

RN 434284-03-4 CAPLUS
CN 2-Pyrimidinamine, 4-(5-methyl-1-phenyl-1H-pyrazol-4-yl)-N-(4-nitrophenyl)(9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

1

ACCESSION NUMBER:

2000:368337 CAPLUS

DOCUMENT NUMBER:

133:4656

TITLE:

Preparation of heteroarylpyrazoles as p38 kinase

inhibitors

INVENTOR (S):

Anantanarayan, Ashok; Clare, Michael; Collins, Paul W.; Crich, Joyce Z.; Devraj, Rajesh; Flynn, Daniel L.; Geng, Lifeng; Graneto, Matthew J.; Hanau, Cathleen E.; Hanson, Gunnar J.; Hartmann, Susan J.; Hepperle, Michael; Huang, He; Khanna, Ish K.; Koszyk, Francis J.; Liao, Shuyuan; Metz, Suzanne; Partis, Richard A.; Perry, Thao D.; Rao, Shashidhar N.; Selness, Shaun Raj; South, Michael S.; Stealey, Michael A.; Talley, John Jeffrey; Vazquez, Michael L.; Weier, Richard M.;

Xu, Xiangdong; Yu, Yi

PATENT ASSIGNEE(S):

SOURCE:

G.D. Searle and Co., USA PCT Int. Appl., 1210 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PA'	PATENT NO. KIND DATE				APPLICATION NO. DATE												
WO	2000	0310	63	А	1	2000	0602		W	0 19	99-U	S260	07	1999	1117		
	W:	ΑE,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
		CZ,	DE,	DK,	DM,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,
														SE,			
		SL,	TJ,	TM,	TR,	TT,	${ m TZ}$,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,
						RU,											
	RW:													BE,			
		DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	\mathtt{CM} ,	GΑ,	GN,	GW,	ML,	MR,	NΕ,	SN,	TD,	TG				
US	6514	977		В	1	2003	0204		U	S 19	98-19	96623	3	1998:	1120		
EP	1144	403		A	1	2001	1017		E	P 19	99-9	55756	5	1999:	1117		
	R:							FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
					,	FI,											
BR	9915	420		A		2002	0122		Bl	R 19	99-1!	5420		1999:	1117		
EE	2001	0026	3	A		2002	1216		El	E 20	01-26	58		19991	1117		
	5123											12344	_	1999	1117		
	6525													20000	0224		
NO	2001	0024	56	Α		2001	0719		N	20	01-24	156		20010	0518		
	1056								B	3 20	01-10	05620)	20010	0619		
PRIORITY	APP	LN.	INFO	. :				Ţ	JS 19	998-	19662	23	Α	1998	L120		

US 1997-47570P P 19970522 US 1998-83670 A2 19980522 WO 1999-US26007 W 19991117

OTHER SOURCE(S):

MARPAT 133:4656

GΙ

AB Title compds. [I; R1 = H, OH, NH2, (cyclo)alk(en)yl, acyl, aryl, etc.; R2 = H, halo, alkyl, alkoxy, (un)substituted piperidinyl, etc.; R3 = pyridyl, pyrimidinyl, quinolyl, etc.; R4 = H, alkyl, heterocyclyl, aryl, etc.] were prepared by reaction of ketones with hydrazines. Thus, R3CH2COMe (R3 = 4-pyridinyl) was condensed with 3,4-F(MeO)C6H3CHO and the product cyclocondensed with TsNHNH2 to give title compound II. Data for biol. activity of I were given.

IT 216505-48-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heteroarylpyrazole p38 kinase inhibitors by cyclocondensation of hydrazines with ketones)

RN 216505-48-5 CAPLUS

CN 2-Pyrimidinamine, 4-(3-methyl-5-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1999:700930 CAPLUS

DOCUMENT NUMBER:

132:151766

TITLE:

Synthesis and antimicrobial activity of

4-(4-pyrazolyl)-2-aminopyrimidines

AUTHOR(S):

Singh, Shiv P.; Batra, Hitesh; Naithani, Rajesh;

Prakash, Om

CORPORATE SOURCE:

Department of Chemistry, Kurukshetra University,

Kurukshetra, 136 119, India

SOURCE:

Indian Journal of Heterocyclic Chemistry (1999), 9(1),

73-74

CODEN: IJCHEI; ISSN: 0971-1627

PUBLISHER:

Prof. R. S. Varma

DOCUMENT TYPE:

Journal English

LANGUAGE:

AΒ

1-(Pyrazol-4-yl)-1,3 butanediones on condensation with guanidine carbonate give 4-(4-pyrazolyl)-2-aminopyrimidines in good yields. A few compds. show moderate level of antimicrobial activity.

IT 257625-23-3P 257625-24-4P 257625-25-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antimicrobial activity of [hydroxy(methyl)pyrazolyl]pyrimid inamines)

RN 257625-23-3 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-phenyl-(9CI) (CA INDEX NAME)

RN 257625-24-4 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-1-(4-chlorophenyl)-3-methyl- (9CI) (CA INDEX NAME)

RN 257625-25-5 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-(2-pyridinyl)- (9CI) (CA INDEX NAME)

IT 257625-26-6P 257625-27-7P 257625-28-8P

257625-29-9P 257625-30-2P

RN 257625-26-6 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-1-(2-benzothiazolyl)-3-methyl- (9CI) (CA INDEX NAME)

RN 257625-27-7 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-(4-methyl-2-quinolinyl)- (9CI) (CA INDEX NAME)

RN 257625-28-8 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-(4-methyl-2-thiazolyl)- (9CI) (CA INDEX NAME)

RN 257625-29-9 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-1,3-dimethyl- (9CI) (CA INDEX NAME)

RN 257625-30-2 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

8

ACCESSION NUMBER:

1998:789144 CAPLUS

DOCUMENT NUMBER:

130:38377

TITLE:

Preparation of heteroarylpyrazoles as p38 kinase

inhibitors

INVENTOR(S):

Anantanarayan, Ashok; Clare, Michael; Collins, Paul W.; Crich, Joyce Zuowu; Devraj, Rajesh; Flynn, Daniel L.; Geng, Lifeng; Hanson, Gunnar J.; Koszyk, Francis J.; Liao, Shuyuan; Partis, Richard A.; Rao, Shashidhar N.; Selness, Shaun Raj; South, Michael S.; Stealey,

Michael A.; Weier, Richard M.; Xu, Xiangdong

PATENT ASSIGNEE(S):

G.D. Searle and Co., USA; et al.

SOURCE:

PCT Int. Appl., 828 pp.

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CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent English FAMILY ACC. NUM. COUNT: 4 PATENT INFORMATION:

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KIND DATE
                                           APPLICATION NO. DATE
     PATENT NO.
                            _____
                      _ _ _ _
                                           ______
                                           WO 1998-US10436 19980522
                            19981126
     WO 9852940
                      Α1
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
                                           AU 1998-75883
     AU 9875883
                       Α1
                            19981211
                                                            19980522
     AU 754830
                       B2
                            20021128
                            19990524
                                           ZA 1998-4358
                                                            19980522
     ZA 9804358
                       Ά
                            20000517
                                           EP 1998-923642
                                                            19980522
     EP 1000055
                       A1
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                                           EE 1999-527
                                                            19980522
     EE 9900527
                       Α
                            20000615
     BR 9809147
                       Α
                            20000801
                                           BR 1998-9147
                                                            19980522
     JP 2002508754
                       T2
                            20020319
                                           JP 1998-550650
                                                            19980522
     NZ 501112
                            20021025
                                           NZ 1998-501112
                                                            19980522
                       Α
     NO 9905695
                            20000121
                                           NO 1999-5695
                                                            19991119
                       Α
                                           MX 1999-10759
     MX 9910759
                       Α
                            20000531
                                                            19991122
PRIORITY APPLN. INFO.:
                                        US 1997-47570P
                                                         P
                                                            19970522
                                        WO 1998-US10436 W 19980522
OTHER SOURCE(S):
                       MARPAT 130:38377
GΙ
```

II

AB Title compds. [I; R1 = H, NH2, (cyclo)alk(en)yl, acyl, aryl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = pyridyl, pyrimidinyl, quinolyl, etc.; R4 = H, alkyl, heterocyclyl, aryl, etc.] were prepared Thus, R3CH2COMe (R3 = 4-pyridinyl) was condensed with 3,4-F(MeO)C6H3CHO and the product cyclocondensed with TsNHNH2 to give title compound II. Data for biol. activity of I were given.

IT 216505-48-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heteroarylpyrazoles as p38 kinase inhibitors)

RN 216505-48-5 CAPLUS

Ι

CN 2-Pyrimidinamine, 4-(3-methyl-5-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file medline		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	43.68	199.31
DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS)	SINCE FILE	ТОТАЦ
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-6.24	-6.24

FILE 'MEDLINE' ENTERED AT 11:39:44 ON 16 APR 2004

6

FILE LAST UPDATED: 15 APR 2004 (20040415/UP). FILE COVERS 1951 TO DATE.

On February 29, 2004, the 2004 MeSH terms were loaded. See HELP RLOAD for details. OLDMEDLINE now back to 1951.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2004 vocabulary. See http://www.nlm.nih.gov/mesh/ and http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html for a description of changes.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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E1		1		JNJ460/BI
E2		1		JNJECTED/BI
E3		5297	>	JNK/BI
E4		599		JNK1/BI
E5		1		JNK11/BI
Е6		2		JNK1ALPHA/BI
E7		1		JNK1ALPHA1/BI
E8		1		JNK1APF/BI
Ε9		1		JNK1BETA/BI
E10)	2		JNK1BETA1/BI
E11	L	1		JNK1BETA2/BI
E12	2	179		JNK2/BI

=> s e1-e12

1 JNJ460/BI

1 JNJECTED/BI

5297 JNK/BI

599 JNK1/BI

1 JNK11/BI

2 JNK1ALPHA/BI

1 JNK1ALPHA1/BI

1 JNK1APF/BI

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10/ 005,133
             1 JNK1BETA/BI
             2 JNK1BETA1/BI
             1 JNK1BETA2/BI
           179 JNK2/BI
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=> s 14 and (inflammato? or inflammati?)
        208109 INFLAMMATO?
        113729 INFLAMMATI?
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=> s 14 and (autoimmune or infecti? or thrombin or thrombo?)
         67423 AUTOIMMUNE
        863955 INFECTI?
         30134 THROMBIN
        218217 THROMBO?
           274 L4 AND (AUTOIMMUNE OR INFECTI? OR THROMBIN OR THROMBO?)
Ц6
=> s 14 and neurodeger?
            15 NEURODEGER?
L7
             1 L4 AND NEURODEGER?
=> s 14 and (cardiac hypertrophy)
        294730 CARDIAC
         48368 HYPERTROPHY
          4493 CARDIAC HYPERTROPHY
                  (CARDIAC (W) HYPERTROPHY)
            55 L4 AND (CARDIAC HYPERTROPHY)
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=> s 14 and (allerg? or bone?)
        100555 ALLERG?
        417905 BONE?
           157 L4 AND (ALLERG? OR BONE?)
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     FILE 'REGISTRY' ENTERED AT 11:38:23 ON 16 APR 2004
L1
                STRUCTURE UPLOADED
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     FILE 'CAPLUS' ENTERED AT 11:38:46 ON 16 APR 2004
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     FILE 'MEDLINE' ENTERED AT 11:39:44 ON 16 APR 2004
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     (FILE 'HOME' ENTERED AT 11:38:12 ON 16 APR 2004)
     FILE 'REGISTRY' ENTERED AT 11:38:23 ON 16 APR 2004
               STRUCTURE UPLOADED
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            44 S L1 FUL
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     FILE 'CAPLUS' ENTERED AT 11:38:46 ON 16 APR 2004
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     FILE 'MEDLINE' ENTERED AT 11:39:44 ON 16 APR 2004
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           5454 S E1-E12
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COST IN U.S. DOLLARS
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                                                      0.00
STN INTERNATIONAL LOGOFF AT 11:44:25 ON 16 APR 2004
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Ngo, Tamthom

From:

Berch, Mark

Sent:

Friday, April 16, 2004 8:17 AM

To:

Balasubramania, Venkataraman; Bernhardt, Emily; Coleman, Brenda; Habte, Kahsay

(AU1624); Kifle, Bruck; Liu, Hong; McKenzie, Thomas; Ngo, Tamthom; Patel, Sudahker; Rao,

Deepak; Raymond, Richard; Shah, Mukund; Tucker, Zachary

Subject:

FYI - from a former primary examiner in electrical area

October, 2003

An Inside Look At The Patent Examination Process

By Scott Wolinsky SWolinsky@volpe-koenig.com

The successful prosecution of a patent application at the U.S. Patent and Trademark Office (USPTO) requires not only a novel invention and adequate prosecution skills, but a bit of luck. Each patent application is examined by an individual selected from an extensive and diverse pool of examiners with varying personalities and technical expertise. The experience and allowance rates of each examiner vary greatly

> Who Is Examining Your Patent Application?

Once received, each patent application is given a serial number and classified (categorized). A patent examiner is then selected based on the classification and serial number. One may wonder whether the selected examiner will be skilled enough to properly search existing prior art references upon which the allowance or rejection of the claims of the patent application are based. After all, every examiner starts with his or her first patent application after receiving just two weeks of training at the USPTO Patent Academy, where he or she learns the basics of the Manual of Patent Examining Procedure. Will your patent application be examined by that newly recruited examiner. If so, will the examiner's supervisor (supervisory patent examiner or SPE) spend enough time to properly review the patent application? There is always a possibility that the SPE is not sufficiently skilled in the art in which the patent application is classified. When an examiner is promoted to SPE, he or she is often placed in charge of an art unit different from the one in which he or she previously examined. For example, a primary examiner with eight years in the medical equipment field may end up assigned to supervise a group of examiners in the telephony art unit.

Patent examiners at the USPTO are initially hired at several different federal pay scale grade levels based on a series of minimal qualifications. All examining positions require at least a bachelor's degree in computer science, physical

science or engineering, and varying levels of professional engineering experience or graduate study (0-3 years), The salaries of entry level patent examiners presently range from \$32,819 to \$70,959. Overtime is strongly encouraged after several months of experience is accrued, and it is not unusual for a junior examiner with three or four years experience to make more than \$100,000 annually with overtime and bonuses. The USPTO also hires recent graduates from law school, as well as candidates with doctoral degrees, who are normally placed at the upper salary levels. Patent examiners hired at the middle salary levels are considered for promotion after six months of service. Thereafter, these patent examiners are normally promoted to a higher salary level on an annual basis.

The odds are slim that your patent application will be allowed by an examiner with less than one year of experience. SPEs want these new employees to gain experience rejecting patent applications, and there is considerable pressure on these new hires to do so. Many examiners are taught the "one palm rule," whereby if the independent claim is shorter than the palm of their hand, they should reject, reject. Examiners actually base their reputation on their allowance ratios. If you knew the allowance rate of your examiner, you could probably estimate your odds of getting your patent application allowed. Even if the examiner rejects all of your claims, the SPE reviewing the application will still be likely to sign away on the examiner's written report, otherwise known as an office action, without closely scrutinizing the rejection.

After four or five years of a successful examining career, the patent examiner is permitted to advance to the Partial Signatory Program. Until this point in the examiner's career, all office actions, whether non-final or final, must be signed by the examiner's SPE. During a six month period, the examiner is granted temporary partial signatory authority to sign non-final office actions. After several SPEs have reviewed the examiner's non-final office actions, the examiner may receive permanent partial signatory authority. With this authority comes increased responsibility, yet no pay raise or formal promotion.

After having partial signatory authority for six months, the examiner is permitted to advance to the full signatory program. During a six-month period, the examiner is granted temporary full signatory authority to sign allowances and non-final office actions. If the examiner of your patent application is in this program, you should remember that he or she will be particularly cautious before issuing a notice of allowance. The examiner's supervisor is paying careful attention to the actions of the examiner, and the examiner wants a promotion. Of course, the examiner must allow at least some (but not too many) of the examined patent applications for review. After another extensive review, the examiner may receive permanent full signatory authority and be deemed a primary examiner.

Some primary examiners are eventually promoted to the uppermost senior examiner salary level (\$103,019-\$125,400), as part-time trainers or "expert" examiners. However, at this level, most examiners go on to become SPEs and are no longer actively examining under a high-pressure production schedule. Instead, they manage and review the work of a group of examiners. Bonuses offered to SPEs are dependent upon the performance of the examiners in their group. The SPEs are very protective of their examiners, and will usually defend them vigorously when confronted by a complaining applicant.

Classification And Search

Prior to examination by a patent examiner, a patent application is reviewed by a classifier to determine which art unit will be responsible for examining the application. In many cases, the scope of the claimed invention in the patent application will fall into several possible categories. It is not unusual for the classifier to present the patent application to several SPEs in an attempt to determine where the application should be classified. This process often causes applications to be docketed to an examiner who is unfamiliar with the technology disclosed therein.

The examination quality of a patent application is dependent upon how thorough a search the examiner performs. Examiners often fail to adequately search art classes with which they are unfamiliar. For patent applications with claims that incorporate diverse technology, the examiner is expected to meet with other equally busy examiners, but this expectation is not always met.

Is your patent application classified in a high-profile art that is presently undergoing extensive media attention for issuance of controversial patents (e.g., genetic engineering) or poor quality patents (e.g., business methods)? If so, you should expect extensive and sometimes unexplained delays in receiving office actions, and it is less likely that you will receive a notice of allowance for your patent application.

Time is Money -The USPTO "Count" System

Each USPTO examiner is allocated a specific number of hours to spend during the prosecution of a patent application. Various performance parameters, such as the examiner's "percent of expectancy" and "percent allowed of disposals," are carefully monitored by supervisors on a biweekly basis to determine performance review results, promotions and bonuses.

Unlike in a law firm where attorneys bill for each hour worked, patent examiners work on a piecemeal basis whereby the examiner is credited only for the number of applications examined. An examiner earns two "counts" per patent application examined. A count is equivalent to half the amount of time that the examiner has to complete the examination of a patent application and "dispose" of it. The number of expected hours per disposal is dependent upon the examiner's experience level and the number of hours allocated to the art examined. The more experience that an examiner has, the fewer hours the examiner is allotted to dispose of an application.

An examiner earns a first "count" upon issuing a first report (office action) regarding the patentability of the patent application and a second "count" when the application is disposed of (allowed, abandoned, or when the examiner responds to an appeal). It is not unusual for an examiner to spend more than the time equivalent to one "count" to complete a first office action. The examiner does not receive extra credit for issuing a second non-final office action, a final office action, telephone interviews or an advisory action. The examiner is allowed to charge one hour of "other" time for each instance when a personal (in office) interview is held with an applicant and/or the applicant's representative.

An examiner earns two "easy counts" when the prosecution of an allowed patent application that has not yet issued is continued such that new references submitted by the applicant can be considered. This, of course, assumes that the references are not deemed relevant enough by the examiner to warrant the withdrawal of the allowance.

Consider The Examiner's Position

Patent examiners are human. They are under a great deal of pressure to perform to the highest standards. You can increase your chances of getting your application allowed by making the examiner's experience with your patent application as stress-free as possible.

You can increase the odds in your favor by limiting the number of claims in the patent application to a reasonable number (e.g., 20 or fewer). Perhaps a major flaw in the USPTO examination process is that a patent examiner is not normally granted extra hours to examine patent applications with excessive claims. In cases involving a large number of claims, it is likely that the examiner will come up with a restriction requirement, or provide a blanket rejection for a large group of those claims. Unless the patent application is examined by an exceptionally conscientious examiner, an excessive number of claims will most likely decrease the quality of the examination.

Always be courteous when speaking with the examiner even if the examiner is being unreasonable. While complaining to the supervisor or the director about an examiner may solve immediate problems, the examiner may hold a grudge and can purposely delay your notice of allowance for years by creating new and seemingly odd rejections. Beware, for the next patent application that you file may be assigned to the same examiner. http://www.volpe-koenig.com/showarticle.asp?Show=12

Mark L. Berch mark.berch@uspto.gov